

*Unclassified Working Paper*

Hurricane Andrew  
24 August 1992, South Florida

**DoD Force Protection Lessons Learned**

Hurricane Andrew

Cut a 35-mile-wide swath south of Miami with 150-mph winds gusting up to 175 mph, and did lesser damage across the South, including in Louisiana. Destroyed 65,000 homes, knocked out water, electricity and phones, and filled roads with heavy debris.

JTF Andrew Support

- 1,014 USAF sorties flown, plus use of 120 DoD helicopters
- Served 35,000 meals/day: total 850,000 meals served
- 1 million MREs delivered
- 80,000 tons of humanitarian supplies moved into the area by sea and land, and another 2,000 tons by air
- 67,000 civilian medical patients treated
- 1,000 tents erected
- Mobile radio station established, with FCC permission and relief-only broadcasting
- Four victim Life Support Centers established, supporting 2,400 people/day
- 6 million cubic yards of debris removed
- 98 schools repaired
- The GAO noted that, by Presidential direction, "DoD provided much of the food, water, sheltering, transportation and medical care, even though the Federal Response Plan assigns those responsibilities to other agencies"
- CINCFOR was the supported CINC, and he established JTF Andrew under the command of LTG Ebbesen, Commander of Second Continental Army
- In 1993, the GAO reported that 30,074 DoD and National Guard personnel were deployed to disaster locations in Florida

Note on the bullets below: These are not verbatim quotes from documents, but summaries of Force Protection-related highlights from the JTF Andrew experience. The FORSCOM After-Action Report alone is 328 pages long, and many other documents were reviewed to build these brief highlights.

**Civilian Interaction Issues**

- Issue: Damage assessment and response  
JTF Andrew lesson: Catastrophe on the scale of Andrew, where communities lost all infrastructure, made them incapable of accurately assessing their own condition. Reported the GAO, "In the case of Hurricane Andrew, it was several days before the local authorities realized how bad the situation was and how much assistance was needed." Thus, supporting state and federal agencies should not waste time waiting

for accurate assessments, but use their experience to push obviously-needed assistance toward devastated communities before citizens begin to die for lack of it. Testified Ms Kate Hale, Dade County Director of Emergency Management to a Senate hearing, "It is a delay which can maim and kill as surely as the hurricane did." She also wisely noted, "The victims of disaster do not care whether it is Federal, State or local government which assists them. They are paying for all of it, and they have a right to expect that we will all be there." The CINCFOR AAR said, "Need lists of tailored 'push packages.'"

- JTF Andrew, FEMA, and local governments simultaneously conducted damage assessment, yet there was not an integrated damage assessment task force or other formal information-sharing and coordination activity, which resulted in duplication of effort.
- Issue: Self-Sustaining Deployment  
JTF Andrew lesson: Almost all assumptions about availability of local support for deploying units are dangerous. Until local facts are known about deployment locations, units should plan to be self-sustaining for water, food, shelter, and medical care. With gas leaks in cities, refineries flooded, etc., they should even be deliberate about determining if the air they will breathe will be safe.
- Note: Navy replenishment ships served by helicopters can deliver large amounts of food inland quickly, as *USS Sylvania* did during JTF Andrew (delivering a million pounds of groceries to 19 state food kitchens). Navy repair ships, with crews up to 1,000, have tremendous engineering capability (electricians, plumbers, carpenters, etc.), and their crews were used by JTF Andrew to re-roof and repair 43 South Florida schools--generating great community enthusiasm for the military. Navy ships provided one-day laundry service for Army personnel ashore, and fed 10,000 meals/day ashore. The Marine Corps built two 2,500-person Life Support Center tent towns for displaced civilians. The Navy and Marine Corps displayed their tremendous capability not only to project power ashore, but to project humanitarian assistance while being totally self-supporting.
- Issue: Traffic and Law Enforcement  
JTF Andrew lesson: Civilians returning home, mixed with incoming military traffic, using the few passable roads, generated major traffic problems. Title 10 troops can do "military necessity" and safety-related traffic control functions tied to the DoD relief effort, but may not enforce civilian traffic laws and may not simply take over for civilian police in any LE duties. Florida National Guard troops stayed in state active duty (SAD) status, and thus could enforce civilian traffic laws. Where workable, use Title 10 troops to free SAD troops from humanitarian assistance roles so they can do the many necessary LE roles--which helps everybody. After their first few days of rescue operations following Hurricane Andrew, LE was the primary mission for the Florida National Guard.
- Issue: Communications

JTF Andrew lesson: When National Guard or local LE officers didn't have radios interoperable with JTF Andrew radios, in some cases the Guard and local LE organizations obtained borrowed compatible equipment from Motorola. Federal forces may not receive loans of equipment.

- Issue: Community Reaction to Military Support

JTF Andrew lesson: It is almost a given that some citizens will say that the military response was too slow, because they have an idea of military capability, they need help immediately, and they may not know or care about the need for the military to be in a supporting role to civilian officials. Once arrived, soldiers carrying weapons generate confidence in many civilians, but fear in others. It's important to not just assume that all soldiers need to be carrying a weapon. It's important that soldiers be encouraged to talk to local citizens--this is America! But remember that American civilians don't use military acronyms, so speak in plain English. JTF Andrew established area command posts and, in many cases, had soldiers going door-to-door to determine the kinds of help needed by citizens--a uniformed presence that generated citizen confidence and also helped deter looting, even though soldiers are not allowed to do civilian law enforcement. Soldiers helped elderly and infirm citizens with basic needs on the spot, generating instant appreciation. Citizens will form opinions of the military presence quickly, and military units need to connect with the community via professional counterparts (police, fire, medical, debris removal, communications, etc.) quickly and regularly. Duplication of effort is common in disaster response--the best way to reduce it is to talk and work carefully with professional counterparts, as a team. One good way to know the pulse of the local community is to talk to local mail carriers, once they start circulating again. If local telephone, TV, radio and newspapers are out, a military communications unit (do not say "Psyop" on the streets of America) with radio, leaflet, etc. capability can be vital in helping civic leaders inform citizens about help available. Always be in a supporting role to local officials (there is potential for directed exceptions, such as Presidential authority to direct federal troops to quell domestic insurrection)--but also let citizens know you're helping. Encourage unit commanders to use their initiative, and encourage soldiers to use their initiative, in helping citizens as they see needs in the field. No disaster response will be perfect, but Americans are smart and see when you're trying to help.

- Issue: Private Donations

JTF Andrew lesson: Donated goods and volunteer services came from all over the nation and the world. They came in three forms: (1) donations for victims, (2) gifts to soldiers in the JTF, and (3) civilian volunteers arriving to help. For the first, supply centers were established to manage them. It was important to completely separate government-furnished supplies vs donated items. For gifts to soldiers, the proffered item often had value that required review to assure acceptability under DoD ethics standards. Generally, strict documentation and accountability were maintained. Civilian volunteer workers were dealt with carefully, as the Federal government is prohibited from accepting voluntary services except in cases of emergency involving the safety of life and the protection of property, and because of potential liability

issues. JTF Andrew prohibited volunteers from working directly for military forces, redirecting them to nongovernmental relief agency efforts, which generally worked neatly.

- Issue: Debris  
JTF Andrew lesson: Debris will block roads, cause injuries, pile up and contribute to disease. Do everything reasonable to encourage and support debris removal.
- Issue: Contracting  
JTF Andrew lesson: Various players noted a need for pre-positioned contracts for disaster-response services, observing that “contractors charged whatever they thought DoD might be willing to pay.” Contracting in mid-disaster is always a challenge, and very expensive. Focus as early as possible on contracting needs.
- Issue: Illegal immigrants seeking aid  
JTF Andrew lesson: Treat everyone equally. Stay out of inquiry into the legal status of people seeking help--let civilian authorities deal with that as they think best. Humanitarian aid is sufficient justification to help people, even if they aren't citizens.

## **Security Issues**

- Issue: LE Coordination  
JTF Andrew lesson: The JTF Andrew AAR said “It is imperative” to assign MP liaison officers to local law enforcement agencies and Army National Guard MP units, especially when they have incompatible communications equipment.
- Issue: ROE  
JTF Andrew lesson: Situations that may be expected will require ROE which, in fairness to the soldier, should be provided in advance. Such questions include: (1) Should a soldier guarding military property detain a looter who is threatening that property? (2) Should a soldier guarding military weapons use deadly force in extremis to protect those weapons?
- Issue: End-state  
JTF Andrew lesson: The establishment of a definable and attainable end-state for military support activities was called “paramount” by the JTF Andrew AAR, to manage expectations of civilian officials who would have been happy to retain DoD support beyond the point when civilian agencies could take over totally.
- Issue: Site security at large DoD-built Life Support Centers established in Florida (where victims could get clean water, ice, hot meals, ambulance service and medical care, child care, tent shelter, showers, use of portable toilets, recreation [e.g., TV] construction materials, donated items).  
JTF Andrew lesson: Asked National Guard and local LE officials to guard these DoD-constructed sites, and local civilian officials to govern them, to minimize Posse Comitatus issues for Title 10 active-duty soldiers. Considering that JTF Andrew

used some 1,000 soldiers and DoD civilians to manage its supply distribution functions, interacting with some 40,000 volunteers, security of all this materiel, at Life Support Centers as well as emergency depots, was not a small job.

- Issue: Prisons and Jails  
JTF Andrew lesson: Early requests for DoD support included light sets for the federal prison. When prisons and jails don't have electricity, clean water or food, their staffs may need help urgently.
- Issue: Maps  
JTF Andrew lesson: DoD units deployed to Florida without adequate maps. One study concluded that over 300 different maps of all varieties were being used by different military units.
- Issue: Protect Federal facilities  
JTF Andrew lesson: As military forces encounter Federal facilities in the disaster area, a conscious decision should be made, in coordination with the owning agency, about whether those facilities require any interim military protection before the owning agency or Federal Protective Service can reestablish control of them.
- Issue: Gangs  
JTF Andrew lesson: Military units working in cities should coordinate with local law enforcement about the potential threat of gang activity, especially when local LE is weakened by disaster conditions. Military units should also plan ahead to destroy any information they're given about American citizens within 90 days after any potential threat is behind them, to comply with the Privacy Act.
- JTF Andrew didn't do MACDIS, so this is as close as they got to a lesson learned related to MACDIS.

### **Force Health and Safety Issues**

- Issue: Hardened HMMWVs are dangerous in urban settings  
JTF Andrew lesson: Always use ground guides when backing a hardened HMMWV. Try to give MPs 4WD street vehicles.
- Issue: Food left in refrigerators without electricity caused sickness  
JTF Andrew lesson: Warn soldiers to leave alone any food from refrigerators that may have been without electricity for days
- Issue: Homeless dogs  
JTF Andrew lesson: Lost dogs get hungry, form packs, and get nasty. Army vets treated farm animals and pets. Civil affairs personnel assisted local animal welfare agencies with animal rescue and lost-and-found, including taking photos of found pets.

- Issue: Mosquitoes  
JTF Andrew lesson: Flooded areas raise mosquito-borne disease risk. AFRES C-130s equipped with sprayers provided wide-ranging mosquito control.
- Issue: Safety focus  
JTF Andrew lesson: The Commander JTF Andrew energized his Safety officers and NCOs to work hard at warning soldiers about unfamiliar risks such as ubiquitous downed power lines, inoperable stoplights, and unfamiliar heavy equipment. In emergencies, young drivers including soldiers tend to drive too fast, creating accidents--especially on roads that are mud-covered and debris-strewn. Tell them to follow the speed limits, and probably go slower.
- Issue: Supply efficiency  
JTF Andrew lesson: Many items required for DoD disaster relief are supplied by DLA and GSA, as well as the Service supply systems and the separate medical supply systems. Often the efficient use of items in disaster relief calls for different packaging or assembling for transport than is the case for normal issue to military units. The JTF Andrew AAR recommended that the logistics community develop a catalog of disaster relief supply items, to save a lot of wasted research, repackaging, onloading and offloading of trucks, etc. just when troops are trying to respond quickly to emergency needs. This idea of a catalog or menu of what's available--ideally tied to real-time visibility into quantities available--is a natural for USNORTHCOM logistics, supporting Force Protection and the entire mission.